

CLAIMS

1. A composite material for use as a base in a wallcovering, which composite material comprises a substrate layer that is permeable to water vapour and a coating layer that is
5 permeable to water vapour such that the composite material has a water vapour transmission rate of at least $30 \text{ g/m}^2 \text{ 24 h}$ at $25^\circ\text{C}/75\% \text{ RH}$, characterised in that the coating layer comprises a plastics material, which plastics material consists essentially of a copolymer of an olefin and an alkyl acrylate or methacrylate or a mixture of two or more such copolymers, the said plastics material having particles of filler distributed therein,
10 and in that the substrate layer comprises a nonwoven material that comprises cellulose fibres.
2. A composite material according to claim 1, in which the nonwoven material comprises woodpulp fibres.
- 15 3. A composite material according to claim 2, in which the cellulose fibres are derived from hardwood pulp and softwood pulp.
4. A composite material according to claim 1, 2 or 3, in which the nonwoven material
20 also comprises synthetic fibres.
5. A composite material according to claim 4, in which the synthetic fibres are polyester fibres.
- 25 6. A composite material according to claim 4 or 5, in which the synthetic fibres have a fibre length of 5 to 20 mm and a linear density of 1 to 6 denier (0.11 to 0.67 tex).
7. A composite material according to any of claims 1 to 6, in which the nonwoven material is bonded with a resin binder.
- 30 8. A composite material according to claim 7, in which the resin binder is an acrylic or vinyl acetate resin.

9. A composite material according to any of claims 1 to 8, in which the nonwoven material comprises an opacity-increasing filler.
10. A composite material according to claim 9, in which the opacity-increasing filler is calcium carbonate.
11. A composite material according to any of claims 1 to 10, in which the substrate layer has a basis weight of from 30 to 200 g/m² and the coating layer has a basis weight of from 10 to 50 g/m².
12. A composite material according to any of claims 1 to 11, in which the plastics material has a water vapour transmission rate of at least 14 g/m² 24 h at 25°C/75% RH, measured on the unfilled plastics material at a mass per unit area of 45 g/m².
13. A composite material according to any of claims 1 to 12 in which the plastics material comprises a copolymer of a C₂ - C₄ olefin and a C₁ - C₄ alkyl acrylate or C₁ - C₄ alkyl methacrylate.
14. A composite material according to claim 13, in which the plastics material comprises a copolymer of ethylene and butyl acrylate.
15. A composite material according to any of claims 1 to 14 in which the filler is present in the coating layer in an amount of up to 40% by weight of the filled plastics material in the coating layer.
16. A composite material according to any of claims 1 to 15, in which the filler in the plastics material is a mineral filler, e.g. calcium carbonate or a mixture of calcium carbonate and titanium dioxide.
17. A composite material according to any of claims 1 to 16, in which the coating layer has a thickness in the range of from 10 to 50 µm and the substrate layer has a thickness in the range of from 80 to 500 µm.

18. A composite material according to any of claims 1 to 17, in which the coating layer is embossed and/or printed to provide a decorative effect.

19. A process for the production of a composite material that has a water vapour transmission rate of at least $30 \text{ g/m}^2 \text{ 24 h}$ at $25^\circ\text{C}/75\% \text{ RH}$ and is suitable for use as a base in a wallcovering, which process comprises applying a coating formulation as a coating layer on a substrate layer, the coating layer and substrate layer being permeable to water vapour, characterised in that the coating formulation comprises a plastics material that consists essentially of a copolymer of an olefin and an alkyl acrylate or methacrylate or a mixture of two or more such copolymers and has particles of filler therein, and in that the substrate layer comprises a nonwoven material that comprises cellulose fibres, and in that the composite material is not stretched by more than 3 per cent in the machine direction and is not stretched by more than 3 per cent in the cross direction.

20. A process according to claim 19 for the production of a composite material according to any of claims 2 to 17.

21. A process according to claim 19 or 20, in which the coating is effected by extrusion coating.

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22. A process according to claim 19, 20 or 21 in which the composite material is not stretched by more than 2 per cent in the machine direction and is not stretched by more than 2 per cent in the cross direction.

23. A process according to claim 19, 20 or 21 in which the composite material is not stretched by more than 1 per cent in the machine direction and is not stretched by more than 1 per cent in the cross direction.

24. A process according to any of claims 19 to 23, in which the coating layer in the composite material is embossed and/or printed to provide a decorative effect.

25. The use as a wall covering of a composite material according to any of claims 1 to 18 or a composite material produced by the process according to any of claims 19 to 24.

26. A method of covering an area of wall surface that comprises applying to said area of wall surface a composite material according to any of claims 1 to 18 or produced by a process according to any of claims 19 to 24.

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